

Amendment Under 37. C.F.R § 1.111  
U.S. Application No.: 09/970,679

### **REMARKS**

Upon entry of this amendment, claims 1-12 are all the claims pending in the application.  
Claim 12 has been added. No new matter has been added.

Applicant thanks the Examiner for initialing the references listed on form PTO-1449  
submitted with the Information Disclosure Statement filed on April 22, 2003.

#### **I. Claim Rejections under 35 U.S.C. § 103(a)**

A. Claims 1-8 and 10 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over  
Thuries (U.S. Patent No. 5,089,665) in view of Floessel et al. (U.S. Patent No. 3,916,081).  
Applicant respectfully traverses this rejection on the following basis.

Claim 1 defines a novel combination of features which forms a gas-insulated multi-phase  
line. Included among the features of this new line are a plurality of sections, each of which is  
formed by metal cladding filled with a dielectric gas under pressure and containing at least three  
phase conductors. Applicant submits that the claimed combination, including at least this  
feature, is neither taught nor suggested by the cited prior art.

Thuries discloses a line having four conductors (see Fig. 1), wherein each conductor (11,  
12, 13, 14) is surrounded by an aluminum sheath (21, 22, 23, 24) and a gas-tight sheath (31, 32,  
33, 34).

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The Examiner asserts that Thuries discloses a gas insulated line made up of sections (Fig.  
8, elements 201 and 301), wherein each section is formed by metal cladding (aluminum sheath)

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filled with dielectric gas under pressure and containing at least one conductor. See Office Action at page 3. Applicant respectfully submits that the Examiner is mischaracterizing the claimed invention.

Contrary to the assertion of the Examiner, claim 1 does not recite that each section of the line is formed by metal cladding containing at least one conductor. Rather, claim 1 plainly sets forth that each section is formed by metal cladding containing at least three phase conductors.

Therefore, as the metal cladding (i.e., aluminum sheath) of Thuries contains only a single conductor, it is clear that Thuries does not teach the claimed feature of metal cladding filled with a dielectric gas under pressure and containing at least three phase conductors. Indeed, Thuries does not even remotely suggest such a feature.

Regarding the claimed feature of the at least three phase conductors being disposed in a triangle configuration, the Examiner applies Floessel and asserts that it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the three conductors of Thuries to comprise the conductors being spaced from each other by 120° as taught by Floessel. Applicant respectfully disagrees.

First, contrary to the assertion of the Examiner, Floessel does not teach conductors being spaced apart from each other by 120°. Rather, Floessel teaches leaf springs which are separated by 120° (see col. 2, lines 27-29). There is no direct correlation, however, between the configuration of the leaf springs and the configuration of the conductors, as appears to be suggested by the Examiner. Thus, as there is no direct correlation between the configuration of

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the leaf springs and the configuration of the conductors, Applicant respectfully submits that Floessel fails to teach conductors spaced apart from each other by 120°.

Second, assuming arguendo, that the combination of Thuries and Floessel is proper and that Floessel somehow teaches conductors spaced apart from each other by 120°, even if the three conductors of Thuries (e.g., 11, 12 and 13) were spaced from each other by 120°, each section of the conductors would be separately encased in a metal cladding as opposed to a single metal cladding containing the three phase conductors disposed in a triangle configuration, as is required by claim 1.

Moreover, Applicant submits that it would not have been obvious to one of ordinary skill in the art to modify the conductor spacing of Thuries such that the conductors are spaced from each other by 120°. Thuries specifically discloses utilizing four conductors, one of which is a spare conductor (see Fig. 1 and col. 2, lines 53-56). Thuries specifically discloses the advantage of having one conductor present which can be used for a spare line.

Thus, as Thuries clearly teaches the advantage associated with utilizing four conductors as configured in Fig. 1, one skilled in the art clearly would not have been motivated to space three of the conductors 120° apart from each other, as is required by the claimed invention. Such a configuration simply would not have been practical.

Therefore, Applicant submits that the disclosure of Thuries clearly teaches away from Applicants' claimed invention. Since a reference which teaches away is a significant factor in determining obviousness, the nature of that teaching is highly relevant and must be considered. *See In re Gurley*, 31 USPQ2d 1130 (Fed. Cir. 1994).

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The Examiner's analysis gives absolutely no weight to the teachings in Thuries which contradict the Examiner's position. The Manual of Patent Examining Procedure ("MPEP ") mandates that "the references must be considered as a whole," and therefore requires the Examiner to consider and confront those passages of Thuries that lead away from the claimed invention. *See* MPEP § 2141.

Based on at least the foregoing, Applicant submits that claim 1 is allowable over the applied art and respectfully requests that the Examiner reconsider and withdraw the rejection.

Claims 2-8 and 10 depend, either directly or indirectly, from independent claim 1. Accordingly, Applicant submits that claims 2-8 and 10 are patentable at least by virtue of their dependency.

In addition, claim 4 recites the features of a first dish-shaped end cap and a second-dish shaped end cap, wherein the caps are provided with orifices to enable phase conductors to pass through them. The Examiner asserts that elements 302 and 303 (see Fig. 8) of Thuries correspond to the end caps as claimed. Applicant respectfully disagrees.

Elements 302 and 303 are disclosed by Thuries as being a first and second tube (see col. 5, lines 42-42-44). Applicant respectfully submits that in no way can these tubes correspond to a first and second dish-shaped end cap as suggested by the Examiner. Further, claim 4 specifically requires that the end caps be provided with orifices, not a single orifice as each of tubes 302 and 303 provide.

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Applicant submits that Floessel fails to cure this deficiency of Thuries. Accordingly, as the combination of Thuries and Floessel fails to teach or suggest all of the features of claim 4, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection.

B. Claims 9 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Thuries in view of Floessel et al. and further in view of the Admitted Prior Art.

Claims 9 and 11 depend, either directly or indirectly, from claim 1. Applicant submits that the admitted prior art fails to cure the deficiencies of Thuries and Floessel as discussed above regarding claim 1. Accordingly, Applicant submits that claims 9 and 11 are patentable at least by virtue of their dependency.

## **II. New Claims**

Claim 12 is added as a new claim. Applicant submits that claim 12 is patentable over the cited prior art based on the combination of features recited therein.

## **III. Conclusion**


In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

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Respectfully submitted,

  
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